Amendments to the Claims:

Please amend the claims as set forth below.

Listing of Claims

1-38 (Canceled).

39. (Currently amended) A data structure embodied in a machine readable storage medium controlling a bulk material baler comprising:

an instruction to a moveable guide track section support strut assembly to move from a removed position to a closed position when a compression apparatus advances a volume of bulk material to be baled into a compressed position in a baling station;

an instruction to an electro-servo motor of a bale wire feed drive to feed a predetermined length of bale wire into a guide track loop when said moveable guide track section support strut assembly reaches said closed position, wherein said predetermined length of bale wire is determined by a number of rotations of a drive shaft of said electro-servo motor of said bale wire feed drive;

an instruction to a wire cutter to cut a proximal end of said predetermined length of bale wire ~~length~~;

an instruction to a wire knotter to knot a proximal end portion of said predetermined length of bale wire together with a distal end portion of said predetermined length of bale wire;

an instruction to said moveable guide track section support strut assembly to move to said removed position after said proximal and distal ~~wire length~~ end portions of said predetermined length of bale wire are knotted together; and

an instruction to said compression apparatus to release from said compressed position after said moveable guide track ~~sections are~~ section support strut assembly is moved away from said compression apparatus.

40. (Previously presented) The data structure of Claim 39 further comprising;

an instruction to a tensioning gripper to grip a distal end of said bale wire length when said bale wire length distal end completes transit of said guide track loop;

an instruction to said bale wire feed drive to reverse drive direction for tensioning said bale wire length after said tensioning gripper secures said bale wire length distal end; and

an instruction to said bale wire feeder drive and to said tensioning gripper to release after said bale wire end portions are knotted.

41. (Previously presented) The data structure of Claim 39 further comprising;

an instruction to at least one tensioning pin to extend when said bale wire length distal end completes transit of said guide track loop; and

an instruction to said at least one tensioning pin to retract after said bale wire length end portions are knotted.

42. (Previously presented) The data structure of Claim 39 further comprising;

an instruction to at least one knotter tie cylinder to reverse for return to a ready position after said bale wire length end portions are knotted together.

43. (Currently amended) The data structure of Claim 39 further comprising;

an instruction to an ejection apparatus to eject ~~the~~ a bound bale from said baling station after said moveable guide track section support strut assembly reaches said removed position and after said compression apparatus decompresses.

44. (Currently amended) The data structure of Claim 39 further comprising;

an instruction to said compression apparatus to begin a next cycle after ~~said~~ a bound bale has moved away from said compression apparatus and said moveable guide track section support strut assembly.

45. (Previously presented) The data structure of Claim 39 further comprising;

an instruction to a moveable guide track section support strut to move from a ready position to a closed position when a compression apparatus advances a volume of bulk material to be baled into a compressed position in the baling station;

an instruction to said moveable guide track section support strut assembly to move to an eject position after said bale wire length end portions are knotted together and released; and

an instruction to said moveable guide track section strut assembly to return from said eject position to said ready position after an ejection apparatus ejects a bound bale from said baling station.

46. (Currently amended) The data structure of Claim 39 wherein said data structure stores strut position data recording ~~the~~ a position status of said moveable guide track section support

strut assembly and wherein said data structure receives said strut position data from at least one proximity switch for signaling said closed position, and at least one proximity switch for signaling ~~said~~ an eject position, said switches being in communication with said data structure.

47. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure to decelerate said ~~progressing~~ predetermined length of bale wire ~~substantially~~ about 2 to 4 inches proximal to ~~said~~ a tensioning gripper.

48. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure to stop said ~~progressing~~ predetermined length of bale wire at a pre-configured length.

49. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure that said predetermined length of ~~the baling~~ bale wire move at a preconfigured speed, said pre-configured speed being between 15 and 100 inches per second.

50. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure that a pre-configured tension be applied to said predetermined length of ~~baling~~ bale wire, said pre-configured tension corresponding to a pre-configured current amperage of said electro-servo motor ~~torque between 0 and 93 inches/pound~~.

51. (Currently amended) The data structure of Claim 39 wherein said data structure signals an alarm and a shutdown at [[an]] a current monitor amperage level predetermined to correspond to an arrest of progress of the predetermined length of bale wire ~~length~~ through the ~~bale wire~~ guide track loop.

52. (Previously presented) The data structure of Claim 39 wherein said data structure signals an automatic alarm and a shut off at a current monitor amperage level predetermined to correspond to an improper tie speed.

53. (Previously presented) The data structure of Claim 39 wherein said data structure signals an automatic alarm and a shut off at a current monitor amperage level predetermined to correspond to an improper tie torque.

54. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure to maintain a preconfigured torque for ~~said~~ a tying cylinder, said torque being within a range between 0 and 54 inches per pound.

55. (Previously presented) The data structure of Claim 39 wherein said instruction in said data structure to feed a predetermined length of bale wire is responsive to a set of user programmable settings for user control of said bale wire length.

56. (Currently amended) The data structure of Claim 39 further comprising an instruction in said data structure constraining current flow to a tying cylinder propulsion electric servo motor, said motor driving said wire knotter, wherein said ~~constraint~~ constraining current flow is responsive to a set of user input parameters for pre-configuring torque.

57. (Previously presented) The data structure of Claim 43 wherein said ejection apparatus has a proximity switch to signal a return to a ready position after ejection of the bound bale of bulk material from said baling station.

58. (Currently amended) The ~~apparatus~~ data structure of claim 39 further comprising a memory for storing a plurality of process variable configurations input by an operator and downloadable for operative application by said programmable logic controller.

59. (Currently amended) The ~~apparatus~~ data structure of claim 39 further comprising a memory for storing historical process data.

60. (Currently amended) A data structure embodied in a machine readable storage medium controlling a bulk material baler comprising:

an instruction to a moveable guide track section support strut assembly to move from a ready position to a closed guide track loop position when a compression apparatus has advanced ~~advancing~~ a volume of bulk material to a compressed position in a baling station such that the volume of bulk material is ready to bale;

an instruction to an electro-servo motor of a bale strapping length feed drive to feed a length of bale strapping into ~~said~~ a guide track loop when said moveable guide track section support strut assembly reaches said closed guide track loop position, wherein said length of bale strapping is determined by a number of rotations of a drive shaft of said electro-servo motor of said bale strapping feed drive;

an instruction to a tensioning gripper to grip a distal end portion of said length of bale strapping ~~length~~ upon said distal end portion of said length of bale strapping ~~length distal end portion~~ having completed a transit of said guide track loop;

an instruction to at least one tensioning pin to extend upon said distal end portion of said length of bale strapping ~~length distal end~~ having completed said transit of said guide track loop;

an instruction to said bale strapping length feed drive to reverse drive direction for tensioning after said tensioning gripper secures ~~securing~~ said distal end portion of said length of bale strapping ~~length distal end portions~~;

an instruction to a bale strapping length cutter to cut a proximal end of said length of bale strapping ~~length~~;

an instruction to a fastener to fasten together said proximal and distal end portions of said length of bale strapping ~~length~~;

an instruction to at least one fastener tie cylinder to reverse for return to a ready position after said proximal and distal end portions of said length of bale strapping ~~length end portions~~ are knotted;

an instruction to said at least one tensioning pin to retract after said proximal and distal end portions of said length of bale strapping ~~length end portions~~ are knotted;

an instruction to said bale strapping length feeder drive and to said tensioning gripper to release after said proximal and distal end portions of said length of bale strapping ~~length end portions~~ are fastened together; and

an instruction to said moveable guide track section support strut assembly to move to an eject position after said proximal and distal end portions of said length of bale strapping ~~length end portions~~ are fastened together;

an instruction to said compression apparatus to release from said compressed position after ~~the~~ said moveable guide track section support strut assembly moves ~~sections move~~ away from said compression apparatus; and

an instruction to said moveable guide track section strut assembly to return from eject position to ready position after an ejection apparatus ejects a bound bale from said baling station.

61. (Currently amended) A data structure embodied in a machine readable storage medium in combination with a programmable logic controller in a bulk material baler control system comprising:

an instruction to a moveable guide track section support strut assembly to move from a ready position to a closed guide track loop position when a compression apparatus and a volume of bulk material reaches a compressed position in a baling station ~~where~~;

an instruction to an electro-servo motor of a bale strapping length feed drive to feed a length of bale strapping into a ~~said~~ guide track loop upon receipt of a signal from said moveable guide track section support strut assembly that it has reached said closed guide track loop position, wherein said length of bale strapping is determined by a number of rotations of a drive shaft of said electro-servo motor of said bale strapping feed drive;

an instruction to a tensioning gripper to grip a distal end portion of said bale strapping length upon receipt of a signal from said electro-servo motor ~~a guide track limit switch~~ that said bale strapping length distal end has completed transit of said guide track loop;

an instruction to at least one tensioning pin to extend upon receipt of [[a]] said signal from said electro-servo motor ~~loop limit switch~~ that said bale strapping length distal end has completed transit of said guide track loop;

an instruction to said bale strapping length drive to reverse drive direction for tensioning after receipt of a signal from said tensioning gripper that said bale strapping length has been gripped;

an instruction to a bale strapping length cutter to cut a proximal end of said bale strapping length after receipt of a signal from said bale strapping feeder drive that said bale strapping has reached a predetermined tension;

an instruction to a fastener to fasten together ~~the~~ said proximal and distal end portions of said bale strapping length;

an instruction to at least one fastener tie cylinder to reverse for return to ready position [[a]] when said bale strapping end portions are fastened together;

an instruction to said tensioning pins to retract after receipt of a signal from said fastener that said bale strapping length end portions are fastened together;

an instruction to said bale strapping length feeder drive and to said tensioning gripper to release after receipt of signal from said fastener that said bale strapping length end portions are fastened together;

an instruction to said moveable guide track section support strut assembly to move to an eject position after receipt of a signal from said bale strapping length feeder drive and said tensioning gripper that said predetermined tension is released;

an instruction to said compression apparatus to release from said compressed position after receipt of a signal from a proximity switch on said moveable guide track section support strut assembly that the moveable guide track sections are away from of said compression apparatus;

an instruction to an ejector apparatus to eject a bound bale from said baling station after receipt of a signal from said moveable guide track section support strut assembly that it has reached said eject position and after receipt of a signal from said compression apparatus that it is decompressed; and

an instruction to said moveable guide track section strut assembly to return from said eject position to a ready position after receipt of a signal from said ejection apparatus that said bound bale has been ejected from said baling station.

62. (New) The data structure of claim 39 further comprising:

an instruction to said electro-servo motor of said bale wire feed drive to decelerate before said predetermined length of bale wire is completely fed into said guide track loop.

63. (New) The data structure of claim 62 wherein said instruction to decelerate is given during the last two to four inches of transit of said predetermined length of said bale wire through said guide track loop.